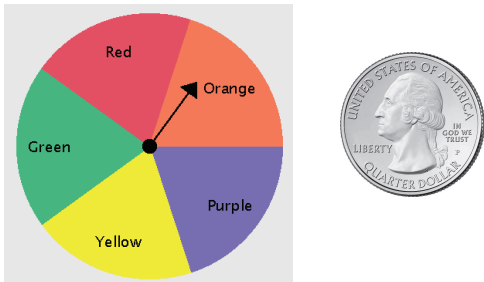


Combinations:

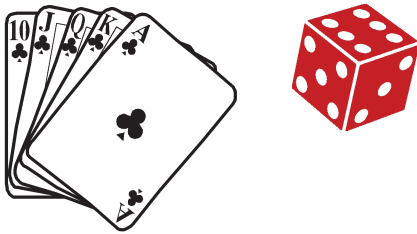
I. Matt flipped a coin, and spun the spinner below. How many possible outcomes could he have gotten? Draw a tree diagram to show each possible outcome:



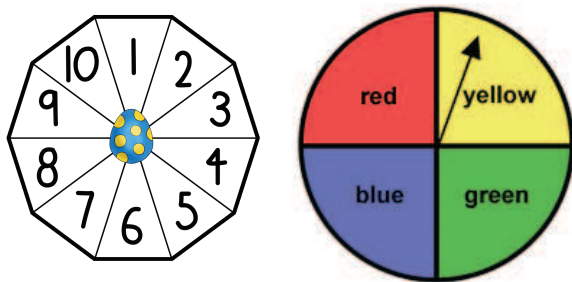
II. Nathalie flips a coin three times. How many possible outcomes could she have gotten? Draw a tree diagram to show each possible outcome:



III. Charlie picks a card from the cards below, and rolls a number cube. How many possible outcomes could he get? Draw a tree diagram to show each possible outcome:



IV. Michelle spun both spinners below. How many possible outcomes could she get? Draw a tree diagram to show each possible outcome:




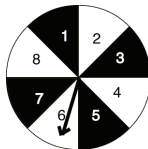
Compound Probability:



Simple Event: _____

Compound Event: _____

Simple and Compound Probability are both found by writing the _____ of _____ to _____.

Decide if each event is a simple or compound event, and then write the probability of the event happening.

Situation	Simple or Compound	Combinations of Possible Events (Highlight the favorable events)	Number of Favorable Outcomes	Probability: <u>Favorable Outcomes</u> / <u>Possible Outcomes</u>
Jack flips a coin twice. What is the probability that the coin lands on heads both times?				
Alexis rolls a number cube, and flips a coin, what is the probability that she rolls a 2 and flips tails? 				
You spin the spinner. Find the probability that you spin a shaded section that is a factor of 10. 				
Mia and Olivia both roll a number cube. What is the probability that they both roll a 5?				
A bag contains 2 red marbles, 1 blue marble, and 3 green marbles. What is the probability that Lucy picks a red marble, puts it back in the bag, then picks a green marble?				

<p>Sandy's camp team consists of 4 boys and 3 girls. If one camper is picked at random to take attendance, what is the probability that a girl is picked two days in a row?</p> 				
<p>Maria picks a number between 1 and 20. What is the probability that the number is a multiple of 3, and a factor of 30?</p> 				

Use the table, list or area model to find the probabilities:

- 1.) If you have two coins, what is the probability that you flip heads on both coins?

	Heads	Tails
Heads		
Tails		

Probability of flipping heads on coin 1 = ----

Probability of flipping heads on coin 2 = ----

Probability of flipping heads on both coins = ----

- 2.) If you have a 6-sided number cube, and a coin, what is the probability that you will roll a "3", and flip tails?

	1	2	3	4	5	6
Heads						
Tails						

Probability of rolling a "3" = ----

Probability of flipping tails = ----

Probability of rolling a 3, and flipping tails = ----

- 3.) If you have a 6-sided number cube, and a coin, what is the probability that you will roll an even number, and flip heads?

	1	2	3	4	5	6
Heads						
Tails						

Probability of rolling an even # = ----

Probability of flipping heads = ----

Probability of rolling an even #, and flipping tails = ----

4.) Write a summary of how to calculate the probability of a compound event:

Probability of Independent Compound Events:

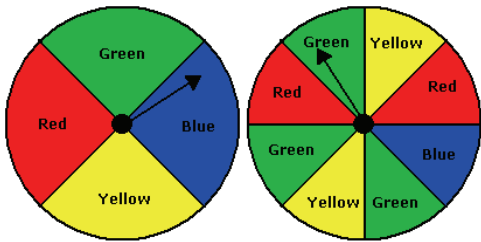
5.) Tyler selects one card from the three, and rolls a number cube. What is the probability that she selects the 5, and rolls a number less than 5?



6.) If you spin the spinner below, and toss the coin, what is the probability of spinning a factor of 15, and flipping heads?



7.) Patrick spins both spinners below. What is the probability that he spins green on both spinners?



8.) The spinner below is spun twice. What is the probability that the spinner lands on “1” then “3”?



9.) Cate drew lettered cards from a stack of cards, and recorded the results in the frequency table below

Letter	A	B	C	D	E	F	G	H	I	J
Frequency	10	4	7	9	5	7	6	2	9	11

Based on the results, what is the probability that Cate will draw a vowel two times in a row?